

ABSTRACT

In a method for encrypting data in an access virtual private network (VPN), a subscriber performs a data encrypting step for data security upon accessing the private network of his company. In this method, access is set up in a dead step according to an access attempt signal by a user. A link control protocol (LCP) negotiation is performed with regard to a mutual authentication method, maximum number of reception bytes, and whether to perform data compression. When the LCP negotiation determines that mutual authentication and data encryption are necessary, the authenticating step is performed first, and mutual authentication is performed by use of a challenge handshake authentication protocol/password authentication protocol (CHAP/PAP). If the authentication is normally completed, the data encryption is performed. Therefore, data encryption is performed together with user authentication so that data is not easily exposed and communication with guaranteed security is performed.